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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/961,126	09/21/2001	Stephen R. Schmidt	28748/37575	4200
4743	7590	09/03/2004	EXAMINER	
MARSHALL, GERSTEIN & BORUN LLP 6300 SEARS TOWER 233 S. WACKER DRIVE CHICAGO, IL 60606			PIAZZA CORCORAN, GLADYS JOSEFINA	
		ART UNIT		PAPER NUMBER
		1733		

DATE MAILED: 09/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	09/961,126	SCHMIDT, STEPHEN R.
	<b>Examiner</b> Gladys J Piazza Corcoran	<b>Art Unit</b> 1733

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

**A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.**

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) Responsive to communication(s) filed on 24 June 2004.
- 2a) This action is **FINAL**.      2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) Claim(s) 10,11,16,17 and 35 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 10, 11, 16, 17, 35 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    - a) All    b) Some \* c) None of:
      1. Certified copies of the priority documents have been received.
      2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
      3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                    | Paper No(s)/Mail Date. _____.   |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____. | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|   | 6) <input type="checkbox"/> Other: _____.                                   |

## FINAL ACTION

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on June 24, 2004 has been entered.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 10, 11, 16, 17 and 35 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Applicant has newly amended independent claim 10 to include "the water and starch combine to form an adhesive joining the first and second webs of medium together". There is no support in the original Specification for the water and adhesive combining to form an adhesive. It is suggested to delete the newly added limitations.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 10, 11, 16, 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Wallick '391 (US Patent No. 5,292,391) or Wallick '458 (US Patent No. 5,332,458) as set forth in the previous Office action.

Wallick '391 and Wallick '458 both disclose an apparatus capable of manufacturing a corrugated product with a corrugating device capable of forming a plurality of flutes on a medium web (rollers 38 and 40), a water supply device capable of applying water to only the crests (spray 48; '391- column 5, lines 30-31, column 7, lines 19-20, column 9, lines 57-60; '458- column 4, lines 18-19, column 5, lines 7-9 and 54-55, column 7, lines 13-16), a starch supply device capable of applying starch only to the crests (glue station 42; '391- column 5, lines 1-3, 41-45; '458- column 4, lines 2-4, 28-32) after the water supply device has applied water to only the crests (see figures), and a securing device capable of securing a second web of medium to the crests (pressure roll 36).

Applicant has added the new amendments of a “water” supply device and a “starch” supply device. The spray 48 in the Wallick references is fully capable of supplying water and the glue station 42 is also fully capable of applying starch. The material worked upon does not further limit apparatus claims (see MPEP § 2115).

Additionally, it is noted that the spray device 48 in the Wallick references applies resin in an emulsion or latex therefore it is considered to be a “water” supply device as these are aqueous solutions including water ('391: column 8, lines 1-15 and column 10, lines 1-10; '458: column 5, lines 46-55 and column 7, lines 19-28). It is further noted that the Wallick references disclose that the glue application device 42 applies conventional glues such as starch ('391: column 5, lines 10-13; '458: column 4, lines 12-14).

Applicant has also added the new amendment of “the water and starch combining to form an adhesive joining the first and second webs of medium together”. This amendment does not add any structure to the apparatus (also, see MPEP § 2115).

As to claim 11, the corrugating device comprises a first corrugating roll and a second corrugating roll (rollers 38 and 40). As to claim 16, there is a second water supply device capable of applying water agent to the crests on the second side of the single faced corrugating board (sprayer 61). As to claim 17, there is a second starch supply device capable of applying starch to the crests on the second side of the first web (adhesive station 60).

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 35 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wallick '391 or Wallick '458 as applied to claim 10 above, and further in view of Westphal (US Patent No. 5,607,508) and/or Miller (US Patent No. 5,609,711).

Wallick '391 or Wallick '458 disclose that the water supply (resin in emulsion or latex) is applied only to the crests in order to reduce costs and for easier recycling of the end product. Wallick '391 or Wallick '458 also disclose that the water supply is either applied by a sprayer device or a roll coater. It is clear that the roll coater in Wallick '391 or Wallick '458 applies the wetting agent only to the crests. It appears that the sprayer device in Wallick '391 or Wallick '458 is capable of applying water only to the crests of the flutes.

Furthermore, it is well known in the art to apply coatings to only the crests of the flutes by using a sprayer. For example, Westphal discloses using a sprayer (pressurized nozzles 13) that applies coating material only to the crests of the flutes (column 3, lines 10-25; column 6, lines 7-19) as an obvious equivalent alternative to using a roll coater (column 5, line 56 to column 6, line 6). Miller discloses another example of using a sprayer to apply a coating to only the crests of flutes (column 7, lines 49-57). It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the apparatus as shown in Wallick '391 or Wallick '458 with a water supply device that is a sprayer that is capable of applying water only to the crests as is well known in the art as an obvious equivalent alternative to a roll coater as further exemplified by Westphal and/or Miller particularly since Wallick '391 or Wallick '458 disclose that the water supply device is alternatively a sprayer.

8. Claims 10, 11, 16, 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Swift (US Patent No. 1,199,508) in view of Wallick '391 or Wallick '458.

Swift discloses an apparatus capable of manufacturing a corrugated product with a corrugating device (rollers 2,3) capable of forming a plurality of flutes on a medium web (web 1, corrugated web 4), a water supply device capable of applying water to the crests (spraying device 6), a starch supply device capable of applying starch to the crests (rollers 29 and 30) after the water supply device applies water to the crests (see figure 1), and a securing device capable of securing a second web of medium to the crests (roller 9).

Applicant has added the new amendments of a “water” supply device and a “starch” supply device. The spraying device 6 in the Swift reference is fully capable of supplying water and the rollers 29 and 30 are also fully capable of applying starch. The material worked upon does not further limit apparatus claims (see MPEP § 2115).

Applicant has also added the new amendment of “the water and starch combining to form an adhesive joining the first and second webs of medium together”. This amendment does not add any structure to the apparatus (also, see MPEP § 2115).

Claim 10 further requires the limitation that water supplying device is adapted to apply water to only a plurality of crests and that the starch supply device is adapted to apply a starch to only the plurality of crests. Swift discloses that the “starch” is applied only to the crests (page 2, lines 17-28). As for the “water”, it is known in the art to apply wetting agents such as the one disclosed in Swift only to the crests in order to save costs and provide for easier recycling. For example, Wallick '391 and Wallick '458 both

disclose applying wetting agent only to a plurality of the crests ('391- column 5, lines 30-31, column 7, lines 19-20, column 9, lines 57-60; '458- column 4, lines 18-19, column 5, lines 7-9 and 54-55, column 7, lines 13-16). It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the apparatus as shown in Swift with a water supply device that is capable of applying wetting agent only to the crests in order to save costs and provide for easier recycling as shown by Wallick '391 and Wallick '458.

As to claim 11, the corrugating device comprises a first corrugating roll and a second corrugating roll (rollers 2,3). As to claim 16, there is a second water supply device capable of applying water to the crests on the second side of the single faced corrugating board (sprayer 17). As to claim 17, there is a second starch supply device capable of applying starch to the crests on the second side of the first web (rollers 29 and 30).

9. Claim 35 is rejected under 35 U.S.C. 103(a) as being unpatentable over Swift in view of Wallick '391 or Wallick '458 as applied to claim 10 above, and further in view of Westphal (US Patent No. 5,607,508) and/or Miller (US Patent No. 5,609,711).

Swift discloses that the water supply device is a sprayer, however does not specifically recite that the wetting device is capable of applying water only to the crests. Wallick '391 or Wallick '458 disclose that the water supply (resin in emulsion or latex) is applied only to the crests in order to reduce costs and for easier recycling of the end product. Wallick '391 or Wallick '458 also disclose that the water supply is either applied by a sprayer device or a roll coater. It is clear that the roll coater in Wallick '391

or Wallick '458 applies the wetting agent only to the crests. It appears that the sprayer device in Wallick '391 or Wallick '458 is capable of applying water only to the crests of the flutes.

Furthermore, it is well known in the art to apply coatings to only the crests of the flutes by using a sprayer. For example, Westphal discloses using a sprayer (pressurized nozzles 13) that applies coating material only to the crests of the flutes (column 3, lines 10-25; column 6, lines 7-19) as an obvious equivalent alternative to using a roll coater (column 5, line 56 to column 6, line 6). Miller discloses another example of using a sprayer to apply a coating to only the crests of flutes (column 7, liens 49-57). It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the apparatus as shown in Swift, Wallick '391 or Wallick '458 with a water supply device that is a sprayer that is capable of applying water only to the crests as is well known in the art as an obvious equivalent alternative to a roll coater as further exemplified by Westphal and/or Miller particularly since Swift, Wallick '391 or Wallick '458 disclose that the water supply device is alternatively a sprayer.

#### ***Response to Arguments***

10. Applicant's arguments filed June 24, 2004 have been fully considered but they are not persuasive.

Applicant argues on page that 7 that the Wallick references fail to disclose a water supply device; that instead Wallick discloses a resin applicator for applying resin material. The devices as shown in the Wallick references (spray 48/roll coater 82) are considered to be water supply devices. The devices in the references have the same

structure and function as Applicant's invention. The material worked upon does not further limit apparatus claims (see MPEP § 2115). It is additionally noted that the "resins" in the Wallick references are aqueous solutions (Wallick- i.e. latex, '391- column 8, lines 5-11, column 10, lines 1-10, '458- column 5, lines 46-55, column 7, lines 19-27) therefore water is supplied.

Applicant argues on page 8 that the Swift reference does not show a starch supply device nor a water supply device. The spraying device 6 in the Swift reference is fully capable of supplying water and the rollers 29 and 30 are also fully capable of applying starch. The material worked upon does not further limit apparatus claims (see MPEP § 2115).

### ***Conclusion***

11. All claims are drawn to the same invention claimed in the application prior to the entry of the submission under 37 CFR 1.114 and could have been finally rejected on the grounds and art of record in the next Office action if they had been entered in the application prior to entry under 37 CFR 1.114. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action after the filing of a request for continued examination and the submission under 37 CFR 1.114. See MPEP § 706.07(b).  
Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gladys J Piazza Corcoran whose telephone number is (571) 272-1214272-1214. The examiner can normally be reached on M-F 8am-5:30pm (alternate Fridays off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Blaine Copenheaver can be reached on (571) 272-11561226. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-1700.



Gladys JP Corcoran  
Primary Examiner  
Art Unit 1733

GJPC